

REMARKS

A. The 35 U.S.C. § 101 Rejections

Claims 1-7 were rejected under 35 U.S.C. §101, the Examiner taking the position that the claimed subject matter is directed to non-statutory subject matter. Specifically, the Examiner contends that the Applicants' invention is neither tied to a particular machine or apparatus nor does it "transform underlying subject matter", citing *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008) cert. granted, ___ S.Ct. ___ (June 1, 2009) (No. 08-964) ("Bilski"). The Applicants respectfully disagree and traverse these rejections for at least the following reasons.

(i) The holdings in *Bilski* do not apply to the present facts/claims.

In *Bilski*, the Federal Circuit stated that "the true issue before us then is whether Applicants are seeking to claim a fundamental principle (such as an abstract idea) or a mental process," *In re Bilski*, 545 F.3d at 952. Accordingly, the USPTO must first establish that the claimed inventions seek to cover a fundamental principle (i.e., abstract idea) or mental process before applying the "machine or transformation" test and supporting rationales as set forth in *Bilski*.

As an initial matter the Applicants note that the Examiner has not indicated that the claims are directed at a fundamental principle or mental process. Further, the Applicants believe that neither rationale is sustainable because the subject matter of the present claims does not encompass the examples of "fundamental principles", "abstract ideas" or "mental processes" set forth in U.S. Supreme Court, Federal Circuit, CCPA or BPAI precedent. To the contrary, the overwhelming evidence is that the USPTO, BPAI, CCPA, Federal Circuit and U.S. Supreme Court have held that subject matter, such as that set forth in claims 1-7, is patent eligible subject matter. The Examiner need only do a search of issued patents to satisfy himself of that fact.

Yet further, the Examiner's apparent belief that claims 1-7 are broad enough "that the claim could be completely performed mentally, verbally or without a machine" is misplaced. This is untenable. The Applicants request that the Examiner provide evidence of such a statement. To the Applicants knowledge, no network existing today uses human beings as network devices. Unquestionably, the processes set forth in method claims 1-7 are so complex that the steps involved require a device with far more computational capability than the human mind to complete in any practical, reasonable time period.

Having failed to satisfy the "fundamental principle" requirement of *Bilski*, the Applicants respectfully request withdrawal of the rejections and allowance of claims 1-7.

(ii) Even If *Bilski* applies, claims 1-7 are directed to patentable subject matter.

At page 3 of the Office Action, the Examiner contends that "the step of assigning a link resource [using] at least one predefined sequence" does not qualify as a transformation of underlying subject matter because the "transformed articles must be "physical objects or substances or representative of physical objects or substances". The Applicants respectfully disagree.

As we have previously stated, and reiterate here, a pre-defined sequence comprising *ports and wavelengths* is clearly data that represents physical and tangible substances – in this case the physical wavelengths used by, and ports of, a node of an optical network.

Further, *Bilski*'s transformation requirement is fulfilled because the claims necessarily require the transformation of a predefined sequence, comprising ports and corresponding wavelengths, in order to assign (claim 1) or select (claim 6) a link resource.

Nor can the assignment step of claim 1 or the selection step of claim 6 be considered insignificant post-solution activity. Rather, these steps are “central to the purpose” of their respective claim (as those terms are used in *Bilski*).

Accordingly, the Applicants respectfully request withdrawal of the rejections and allowance of claim 1-7.

B. The 35 U.S.C. § 102 Rejections

Claims 1, 2, 6, 8, 9 and 12 were rejected under 35 U.S.C. § 102(e) as being anticipated by Beshai et al., U.S. Patent No. 6,744,775 (“Beshai”). The Applicants respectfully disagree and traverse these rejections for at least the following reasons.

Of the rejected claims, claims 1, 6, 8 and 12 are independent claims. It is to these claims that Applicants now turn, it being understood that the remaining claims depend on these claims and, therefore, the remarks which follow apply equally to these claims as well. Further, because independent claims 6, 8 and 12 recite similar features as claim 1, for the sake of clarity the Applicants direct their attention to claim 1.

Independent claim 1 includes the feature of “at least one predefined sequence [resulting] from a negotiation with [a] neighboring node prior to receipt of [a] connection request”. Beshai does not appear to disclose this feature.

In Beshai, a controller appears to “distribute” nodal routing tables and link state information to interconnected nodes in a network (*see* Beshai, col. 5 ln 42-45 and Fig. 19, step 1902). But Beshai’s controller is not a *neighboring node* because such a controller can be located anywhere (i.e., there is no requirement that a controller be a *neighboring node*, *see* Fig. 18, particularly step 1804).

Further, Beshai does not disclose the use of the claimed pre-defined sequence. In the Office Action the Examiner appears to equate a “routing table” with the claimed pre-defined sequence. This is incorrect.

As the Examiner knows well, though Examiners may interpret claims broadly any interpretation must be reasonable and consistent with the specification. *In re Hyatt, supra*. Here, the Examiner’s interpretation of a routing table as being akin to the claimed predefined sequence is inconsistent with the specification and, therefore, impermissible.

Specifically, the phrase “predefined sequence” in the claims of the present invention means at least a sequence that is used to assign or select link resources within a single node. Further, such link resources include ports and corresponding wavelengths.

In contrast, Beshai makes no mention of the use of a “sequence” whatsoever. Further, Beshai’s routing tables appear to include information such as traffic occupancy information (*see Beshai at col. 2 ln 8-11*), not pre-defined sequences, ports or wavelengths.

In sum, because Beshai does not disclose each and every feature of claims 1, 6, 8 and 12 it cannot anticipate these claims and their associated dependent claims based on 35 U.S.C. §102(e). Reconsideration and withdrawal of the rejections is respectfully requested.

C. **The 35 U.S.C. § 103 Rejections of claims 1-2, 6, 8-9, and 12**

Claims 1-2, 6, 8-9, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,256,295 (“Callon”) in view of Beshai. The Applicants respectfully disagree and traverse these rejections for at least the following reasons.

Of the rejected claims, claims 1, 6, 8 and 12 are independent claims. It is to these claims that the Applicants now turn, it being understood that the remaining claims depend on these claims and, therefore, the remarks which follow apply equally to these claims as well. Further,

because independent claims 6, 8 and 12 recite similar features as claim 1, for the sake of clarity the Applicants direct their attention to claim 1.

As the Applicants have stated in their responses to previous Office Actions, and now reiterate here, Callon does not appear to disclose or suggest the feature “wherein the at least one predefined sequence resulted from a *negotiation* with [a] neighboring node prior to receipt of [a] request”. Rather, as Callon itself explains, the “link state packets” received by node 50 are from every node within a network (Callon, col. 4 ln 19-29), not from a *negotiation* with a *neighboring node* prior to the receipt of a connection request. Nor does Beshai make up for the absence of this feature as explained above.

Yet further, in the Office Action the Examiner appears to acknowledge that Callon does not disclose the feature of at least one predefined sequence “comprising ports and corresponding wavelengths within a node” as in the present claims. To make up for this deficiency the Examiner appears to rely upon Beshai. However, as described beforehand, Beshai does not disclose or suggest such a feature.

Still further, referring to page 8 of the Office Action, the Examiner cites the following language from Beshai:

The capacity of a link may be changed dynamically by adding channels, for instance by assigning new wavelengths in an optical network. The cost of a link may be defined according to several criteria including such qualities as reliability and delay (see Col. 1, lines 24-29).

Applicants fail to understand the Examiner’s reliance on this language from Beshai. It appears as if the Examiner is relying on this language to bolster the position that Beshai discloses or suggests the claimed feature of “assigning a link resource selected from link resources that have been released for connecting to a neighboring node by using at least one predefined

sequence, that comprises ports and corresponding wavelengths within a node". However, it is unclear to the Applicants. Accordingly, the Applicants request that the Examiner clarify his position in the next Office Action.

To the extent the Applicants understand the Examiner, the Applicants note the following. The claims are directed at something more than the general assignment of wavelengths. To the extent that Beshai discloses such an assignment, such a disclosure is not relevant to the issue of anticipation or obviousness of the claimed inventions.

In sum, the Applicants submit that the subject matter of claims 1-2, 6, 8-9, and 12 would not have been obvious to one of ordinary skill in the art at the time the present application was filed based on the disclosures of Callon and Beshai.

D. The 35 U.S.C. § 103 Rejections of claims 4 and 11

Claims 4 and 11 appear to be rejected under 35 U.S.C. § 103(a) based on the combination of Callon, Beshai and U.S. Patent No. 7,009,966 to Borchering ("Borchering"). The Applicants respectfully disagree and traverse these rejections for at least the following reasons.

Initially, the Applicants note that there appears to be a typographical error in the Office Action. While the first sentence of item 10 (Office Action, page 11) refers to a rejection based upon the combination of Beshai and Borchering, the last paragraph appears to refer to a rejection based on Borchering, Callon and Beshai. The Applicants respectfully request clarification of the rejections. Assuming the rejections are based upon the combination of all three references, the Applicants respond as follows.

Claims 4 and 11 depend on claims 1 and 6 and are, therefore, patentable over the combination of Borchering, Callon and Beshai at least for the reasons set forth above and because

Borcherling does not make up for the deficiencies of Callon or Beshai. Accordingly, Applicants respectfully request withdrawal of the objections and allowance of claims 4 and 11.

E. Entry of Request for Reconsideration

Entry of this Request for Reconsideration ("Request") is solicited because the Request: (a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issues requiring further search and/or consideration; (c) does not present any additional claims without canceling the corresponding number of finally rejected claims; and (d) places the application in better form for appeal, if an appeal is necessary.

Should there be any outstanding matters that need to be resolved in the present application the Examiner is respectfully requested to contact John E. Curtin at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-3777 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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